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ABSTRACT

This paper reports the results of a 5-month study of 4, self-selected Problem-Based Learning (PBL) teams taking a leadership capacity-building course in the Educational Leadership Program in the Graduate School of Education and Information Studies at UCLA. Twenty-six students in the course were divided into five teams of five to eight members each. Efforts were made to ensure that team members were equally distributed on the basis of professional experience, age, gender, and ethnicity. The group dynamics of each of the four teams are summarized. At the end of the course, students completed a variety of quantitative and qualitative team-assessment instruments, including a two to three page self and other behavioral assessment. Members of three of the four teams reported general satisfaction with the PBL process. Members of these teams communicated well with one another, shared their knowledge and skills, and adopted distributed leadership patterns. In the team reporting an unsatisfactory experience, students complained of poor communication among the members, lack of participation by one member, and the emergence of a leadership pattern dominated by two members. Faculty efforts to improve the effectiveness of the "dysfunctional" team were ineffective. While the study provides interesting insights into team dynamics, questions about the reasons for differential team member perceptions and intervention efforts to improve team interaction patterns remain unanswered. (Contains 15 references.) (PKP)

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Understanding How PBL Teams Work: Re-thinking the Dimensions of Teamwork

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Understanding How PBL Teams Work: Re-thinking the Dimensions of Teamwork

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Doubts about the effectiveness of educational leadership programs have multiplied with the escalating call for school reform. To the public and to many educators, educational reform is synonymous with new types of school leadership. As noted by Murphy (1992), leadership preparation must reflect the needs of school leadership. Traditional courses and grades have a poor relationship to performance. A review of 27 published articles by Cavanaugh (1993) failed to find a relationship between academic grades and professional competence. Some educational leadership programs conceptualize their programs around the multi-layered responsibilities and assignments of school administrators. But according to Clark and Clark (1996), leadership preparation must focus on communication, personal development, shared vision, and learning communities. The ideal of one instructor lecturing to a class is fading in favor of a model that involves small groups of students working together on case studies, simulations or problem solving in education.

Bridges (1992) and Bridges and Hallinger (1995) use complex simulations in an instructional method, problem-based learning (pbl) to study the issues that face many school administrators. Problem-based learning has been defined in two ways. Bereiter and Scardamalia (2000) suggest that PBL (uppercase) conforms to the model used in medical education as defined by Barrows in 1986 while "lowercase pbl" is associated with a wide range of educational teaching methods that focus on a problem. The Educational Leadership Program (Ed.D.) at UCLA used pbl (lowercase) to enable students (Kindergarten - 16 educators) to study real site-based problems. This method was selected because students could work together in groups as they generated their own learning objectives and project goals. This paper focuses on the students' experiences in their groups and the relationships between group learning and leadership education.

Over a period of seven years, the faculty of UCLA's doctoral program (Ed.D.) in Educational Leadership re-designed what students are taught and how they are taught. Faculty had often observed that student teams were troubled by behaviors that hindered their progress or made for unequal workloads. The positive elements of collaboration were sometimes illusive. Senge (1990) notes that in great teams, conflict becomes productive. "The free flow of conflicting ideas is critical for creative thinking, for discovering new solutions no one individual would have come to on his/her own". Some teams avoided discussing conflicts while others confronted conflict head-on only to discover that they had alienated members of their cohort.

Senge's (1990) ideal of "alignment" (a team functioning as a whole) was illusive in most cohort team projects. The need to assist students to understand and to deal with the dynamics of their own groups and their own behavior in groups assumed critical importance with the need for students to successfully collaborate at their schools and colleges.

PBL and Teamwork

Twenty-six students in their first year of the Educational Leadership Program began a three-quarter course, Leadership Capacity-Building in September 1999. The course combined

discussions about leadership, creativity and team collaboration with team projects. Team processes were discussed and diagnostic questionnaires were used to assess team processes and dynamics. Students wrote journal entries about their teams. Questions were provided for some of the entries. Students were given feedback on their individual and team performances as well as on their journal entries. Team learning exercises from The Fifth Discipline Fieldbook (Senge, Kleiner, Roberts, Ross and Smith, 1994) were employed as were communication exercises. There was a discussion of ways to become mindful listeners (Langer,1989).

The sites[1] selected for 1999/2000 were an urban high school, a school district, a community college and a university. At the initial class meeting, students received packets of information about pbl, teams, assignments, the project sites, articles about collaboration, leadership, creativity, and a book with practical advice about working in teams (Rees, 1991). During the three-quarters, students completed team assessments[2] about how they were doing as a team and as a member of their team. At the end of the course, they completed a two-to-three page discussion of their team's processes and effectiveness, their role(s) within the team and their own effectiveness as a member of the team. Comments from the assessments are discussed below.

The four teams were self-selected. They ranged in number from five to eight members but did not fit any patterns associated with membership by age, gender or ethnicity. Teams were balanced in terms of professional experience, age and number of men and women.

While all the teams faced similar issues at the beginning of their projects, they reacted to them differently. *What should they do and how should they do it?* As a member of team A said, "We developed a bond immediately. We didn't need norms and procedures." According to a Team B member, "Signs of dysfunction were present from the beginning (awkward communication, no immediate plan of action, no one stepping up to the plate to be the facilitator and no common thread)." A team C member described their process quite differently, "We spent the first few meetings defining roles and responsibilities, getting to know one another, talking about our project, sharing our common fears about the project, and establishing ground rules." According to a member of Team D, "At the beginning we decided that no one person should do all the work. We delegated responsibilities based on strengths and work schedules."

Team A

Team A decided to plan a program that would provide professional development for the new (and uncredentialed) teachers at an urban high school. They said that they felt very congenial and goal-oriented from the beginning. They enjoyed themselves and had a relaxed attitude toward the project. They took turns at the helm and most members collaborated. Several members said that they felt a strong sense of trust towards the other members. As could be expected, not all members perceived their team's dynamics in the same light. "The relaxed attitude led to an unequal distribution of work and a lack of commitment of some members." "It was an effective group but not a high performing group." The satisfaction of the members of the team seemed to range from somewhat satisfied to "pretty amazing team to watch in action," "we used our individual skills to produce a useful product and remained supportive of each other."

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[1] The identification of the sites has been changed for purposes of confidentiality.

[2] The assessments were revised after the conclusion of the 1998/99 course.

Team B

Conflict emerged in Team B even before they encountered difficulties at their site, a school district. Communication between members of the team was difficult. Gender issues emerged. "The team was like a men's athletic team with joking, bantering, cheering the team on but no openness or directness in personal relations." Some actions by the team were characterized as "effective but chaotic." All the members indicated that the work of the team was impeded by the behavior of its members. "Some members blocked the development of roles." "Some members were passive." "There was the perception that members have different work ethics." "There was an aversion to holding meetings." "The chemistry of the group did not help much."

Two faculty made several interventions with Team B members and the whole team. One team member said, "There was a forced discussion of group processes and an airing of dissatisfactions but no changes were made." "Toward the end we pooled our resources and energy." "We had a good project despite individual beliefs and philosophies." "There were lone guns." "There were no formal processes." "There were unspoken agendas." "We volunteered for roles but the roles disappeared because there was a lack of leadership." "Meetings digressed into circular discussions of issues not related to decisions that needed to be made."

Members viewed the product (a workshop for a school district) as somewhat successful. But, as one member concluded, "In this case, winning was everything because we sure didn't play the game very well."

Team C

Team C developed a plan to identify and prepare new faculty for teaching at a community college. They consciously developed team processes. Formal roles included: "president" or "facilitator", "recorder", "rover", "researchers", and "principal communicators." They established norms, a group vision and a rallying cry. Members characterized their group as having a high degree of "openness" and "receptivity to others' ideas." "There was a great deal of flexibility and interchangeability of roles." Conflicts were acknowledged and discussed. Most members rated their team high on interpersonal issues such as empathy, friendliness, and sensitivity to personal and professional time constraints. One member disagreed, "No time was spent on team maintenance. We discussed the readings about teams but nobody took it to heart. Some would not participate, some would focus on the work, some would participate grudgingly."

Five of the six members of Team C voiced satisfaction with their project. "Great experience." "It benefited my own work." "We were a great team individually and collectively." "The team did a fine job and the product should be useful." "The experience working on the team has been a very satisfying one and I would work with them again." One member evaluated the project differently; "Good product but it didn't help the college with teacher recruitment."

Team D

The members of Team D were also "collegial" as they developed a program to bridge the gap between high school and college. Despite the fact that only two out of the five members attended the first meeting, the team adopted their initial plan. Members said that they compromised when there were differences of opinion. Knowledge about the issues ranged from low to very high among members of the team. "A subset of the team became the

driving force." "They guided the meetings and the many email exchanges." One member was "The glue that that kept us together." Yet "each person viewed the project differently." "Information was not shared actively." One member felt isolated from the others and admitted to the class to "not having passion for the project."

At the conclusion of the project, the members of Team D said that they had learned a lot about themselves. "I became aware of how I perform in a group." "I am now aware of my own impatience." "I am more task oriented." One member said, "I am proud of what we accomplished. We developed a product that our questionnaire shows will be useful."

Discussion

After working in teams for five months, students completed a team assessment that dealt with their teamwork. This included multiple choice and open-ended questions about team dynamics, roles, communication patterns, values, conflict and taboos. Students were also asked to describe their own team behavior. At the completion of the project, students were asked to assess the work of their team. In these two-to-three page assessments, they discussed their own behavior as well as those of their teammates.

The discussions yielded information about both the teams' dynamics and its productivity. Some members voiced satisfaction with their products but great dissatisfaction with how the products were developed by the members. Some members viewed their team as high in congeniality, openness and trust but regarded their project as flawed.

A comparison of the team's responses suggests that there are reoccurring themes in teams that worked well together and in those that didn't. The team that viewed itself as "dysfunctional", mentioned communication issues including those based on gender, and avoidance of discussing problems. Discussions became circular and their best work was accomplished by email. Some members were disappointed or dissatisfied with the group dynamics while some, at times, disassociated themselves from the project. This team was divided into three of more camps. Each was unhappy with some aspect of the team process or the product. There was agreement by all members on three points: one member did not contribute, they felt some ambiguity from the client and that the team was dysfunctional.

In the "dysfunctional" team, leadership emerged through the expertise of one member and the actions of a second member. All of the members found fault with the way the leadership worked. In the more satisfied teams, leadership was disbursed and sequential. It reflected the knowledge and abilities of each of the team's members (except one member). The research by Kouzes and Posner (1993) suggests that within effective teams, the behaviors of individual members are close to identical to those of leaders.

Three teams regarded themselves as successful. One member of each of these teams mentioned a lack of communication. Many of the members were clear in their appreciation for the work of most of the other members of the team and for the knowledge and skills of other members. On each of these three teams, members said that there was one member who some felt were not "doing their share." The three teams were also alike in that they developed leadership patterns that were acceptable to all but one member.

Interventions by faculty with the team that regarded itself as "dysfunctional" proved to be ineffective. The recent study about PBL by Duek (2000) concluded that the students she studied did not participate equally in group discussions. The author identified differences in participation between ethnic groups.

There is much to be learned from dissecting the work of teams but it is not an easy or obvious process. Why and how do students on the same team view the same events differently? Nor is it easy to design interventions that will help teams change the interaction patterns that emerge over very short periods of time. In The Soul of a New Machine, Kidder (1981) describes a loosely coupled team who comes together on a one-time basis. They develop a new Central Processing Unit for a computer in an exceptionally short period of time. Bennis and Biederman (1997) describe five teams made up of people who often do not get along, work in challenging environments yet are able to create revolutionary products. The question remains, how do we help teams of educators to understand and improve their own work?

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